

List of Responses

Dear Editors and Reviewers:

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled "Portal Vein Gas combined with Pneumatosis Intestinalis and Emphysematous Cystitis: A Rare Case Report and Literature Review" (ID: 75313). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portions are marked in red in the paper. The main corrections in the paper and the responses to the reviewer's comments are as follows:

Responses to the reviewer's comments:

Reviewer #1:

1. Response to comment: The authors did not discuss the cause of PI in this case (e.g., COPD, drug, and exposure to certain chemical substances).

Response: Thank you very much for the reviewer's suggestion that we neglect the cause analysis for the PI in this article. We humbly accept the opinions of the reviewers. And add a discussion of the reasons for PI in the discussion section without changing the structure of the article. More details in the third paragraph of discussion.

2. Response to comment: The authors should be notified that portal vein gas did not always mean bowel ischemia or necrosis.

Response: I am very grateful to the reviewer for pointing out that PVG does not always mean intestinal ischemia or necrosis. We also found similar reports in the process of literature review, and we have increased the discussion of relevant parts in the article. However, the simultaneous appearance of PI, PVG and pneumatosis in arterial system is of great guiding significance to intestinal ischemia or necrosis. We have added the correction of relevant content to the article. More details in the third paragraph of discussion. Thank you very much for your valuable comments.

Response to comment: Did the authors consider performing a colonoscopy even patient's condition?

Response: Regarding whether the colonoscopy was meaningful for the diagnosis and treatment of

this patient, we clarified that the lesion was focused on the small intestine part in the patient's treatment, which the colonoscopy might have limited significance for this patient. And the patient was in poor general condition after hospitalization, who could not tolerate the related examination items. If the patient's condition is stable, we will also take your recommendation to refine the related colonoscopy. Thank you again for your comments.

Response to comment: Did the patients receive high oxygen therapy?

Response: The patient was treated with high-flow oxygen inhalation immediately after admission, but no significant improvement was observed due to his critical condition. We have made correction according to the Reviewer's comments. More details in the sixth paragraph of discussion.

Response to comment: What are the criteria for operation besides portal vein gas? (e.g., blood gas analysis and measurement of lactate and INR).

Response: Our criteria for surgery in this patient are based more on the presentation of the patient's clinical symptoms, blood or imaging findings. Of course, the surgical criteria are still controversial through literature review. Doctors in charge need to rely more on the specific circumstances of patients to decide the timing. More details in the eighth paragraph of discussion.

Response to comment: The magnification value and measurement are necessary for histopathological and macroscopic findings.

Response: We have made correction according to the Reviewer's comments.

Special thanks to you for your good comments.

Reviewer #2:

Response to comment: Interesting case, very well described and analyzed, high educational value.

Special thanks to you for your good comments.

Reviewer #3:

1. Response to comment: there was no comment on the option of laparoscopy for milder cases as a safe alternative to rule out mesenteric ischemia, which has high mortality.

Response: Endoscopic exploration can be used in the diagnosis and treatment of such patients, but it may be necessary to assess the surgical risk and surgical tolerance of patients. Our patient's condition was not relevant, and as an emergency procedure, we underwent laparotomy.

Response to comment: The gas present in the arterial system was not well discussed in the text,

which seems to be the rarest finding in the case presented. It should be better explored.

Response: Thank the reviewer for reminding me to carry out an in-depth exploration on this rare phenomenon of the gas present in the arterial system. A review of the literature reveals that this phenomenon is indeed more rare and more dangerous. I have already added relevant content to the sixth paragraph of the discussion. More details in the sixth paragraph of discussion. particular thanks to you for your direction.

In all, I found the reviewer's comments are quite helpful, and I revised my paper point-by-point. Thank you and the review again for your help!

We appreciate for Editors/Reviewers' warm work earnestly, and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestions.

With kind regards,

Sincerely yours,

Dr. Shifu Hu

Corresponding author